

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings of claims in this application.

Listing of Claims:

1. (Currently Amended) A binding motif capable of binding to a cytoplasmic protein said motif ~~consisting of~~ comprising the following amino acid sequence:

N-X-X-Y

wherein X is any residue, and Y is a tyrosine residue or an equivalent thereof.

2-7. (Canceled)

8. (Currently Amended) ~~A The binding motif according to any one of claims 1 to 7 of claim 1~~ wherein the sequence ~~includes~~ comprises the common beta chain (β c).

9. (Currently Amended) ~~A The binding motif according to any one of claims 1 to 8 of claim 1~~ wherein the ~~Tyr~~ tyrosine residue is equivalent to residue Tyr577 of the common beta chain (β c).

10. (Currently Amended) ~~A The binding motif according to any one of claims 1 to 9 of claim 1~~ having a modification at a residue equivalent to the ~~Tyr~~ tyrosine residue.

11. (Currently Amended) ~~A The binding motif according to any one of claims 1 to 10 of claim 1~~ wherein the residue equivalent to the ~~Tyr~~ tyrosine residue is substituted with a ~~Phe~~ phenylalanine residue.

12-13. (Canceled)

14. (Currently Amended) A method of modulating ~~activity in a cell~~ cellular activity in a cell, said method ~~including~~ comprising:

introducing a modification to a binding motif capable of binding to a cytoplasmic protein said motif ~~consisting of~~ comprising the following amino acid sequence:

N-X-X-Y

wherein X is any residue, and Y is a tyrosine residue.

15. (Canceled)

16. (Currently Amended) A The method ~~according to~~ of claim ~~15~~ 14 wherein the tyrosine residue is equivalent to Tyr577 of the common beta chain (β c).

17. (Currently Amended) A The method ~~according to~~ of claim 16 wherein the common beta chain (β c) is of the GM-CSF/IL-3/IL-5 receptor.

18. (Currently Amended) A The method ~~according to any one of claims 15 to 17 of claim 14~~ wherein the activity is modulated by introducing a modification of phosphorylation of the ~~Tyr~~ tyrosine residue of the motif.

19. (Currently Amended) A The method ~~according to~~ of claim 18 wherein the phosphorylation is increased by subjecting the cell to a phosphorylating agent.

20. (Canceled)

21. (Currently Amended) A The method ~~according to~~ of claim 18 wherein the phosphorylation is decreased by mutating, substituting, or deleting the ~~Tyr~~ tyrosine residue.

22. (Currently Amended) A The method ~~according to~~ of claim ~~23~~ 21 wherein the ~~Tyr~~ tyrosine residue is substituted for ~~Phe~~ phenylalanine.

23. (Currently Amended) A The method ~~according to~~ of claim 18 wherein the phosphorylation is decreased by subjecting the cell to an antagonist which inhibits phosphorylation of the ~~Tyr~~ tyrosine residue.

24. (Currently Amended) A ~~The~~ method ~~according to~~ of claim 18 wherein the phosphorylation is decreased by subjecting the cell to a kinase inhibitor to inhibit phosphorylation of the ~~Tyr~~ tyrosine residue.

25. (Canceled)

26. (Currently Amended) A ~~The~~ method ~~according to~~ of claim ~~25~~ 14 for ~~inhibiting~~ modulating cellular activity ~~in a cell~~, said method further comprising inhibiting binding of a cytoplasmic protein to the motif.

27-28. (Canceled)

29. (Currently Amended) A ~~The~~ method ~~according to~~ of claim ~~19 or 20~~ 18 for ~~activating~~ modulating cellular activity, said method comprising activating cellular activity by inducing phosphorylation of the ~~Tyr~~ tyrosine residue of the motif.

30. (Currently Amended) A ~~The~~ method ~~according to any one of claims 14 to 29~~ of claim 14 wherein the cellular activity is selected from the group ~~including~~ comprising: cell survival; proliferation; differentiation; mitogenesis; transformation; chemotaxis; motility; enhanced phagocytosis; phagocytosis; enhanced bacterial killing; superoxide production; and cytotoxicity.

31-57. (Canceled)

58. (Currently Amended) A method for screening of cell growth promoting compounds, said method ~~including~~ comprising:

obtaining a cell having a receptor containing a the common beta chain (β c) ~~be~~ having a Tyr577 residue or equivalent;

inducing phosphorylation of ~~the Tyr~~ a tyrosine residue or an equivalent in a binding motif ~~according to any one of claims 1 to 13~~ capable of binding to a cytoplasmic protein said motif consisting of the following amino acid sequence:

N-X-X-Y

wherein X is any residue, and Y is a tyrosine residue or an equivalent thereof;

exposing the cell to the compound; and

assessing colony formation of the cells.

59. (Currently Amended) A ~~The~~ method ~~according to~~ of claim 58 wherein the ~~Tyr~~ tyrosine residue is equivalent to Tyr577 of the common beta chain (β c).

60. (Currently Amended) A ~~The use according to~~ method of claim ~~56~~ 58 wherein the common beta chain (β c) is of the GM-CSF/IL-3/IL-5 receptor.